

PRODUCTION OF CRYSTAL OF COMPOUND SEMICONDUCTOR

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Inventor(s): SAKUMA YOSHIKI
Applicant(s): FUJITSU LTD
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Abstract

PURPOSE: To provide a method of growing crystal of compound semiconductor having two or more kinds of atomic layers of group III having different atomic compositions in a method of atomic layer epitaxial growth of compound semiconductor and in crystal growth of piling atomic layers one by one by alternately changing a raw material gas and feeding.

CONSTITUTION: In atomic layer epitaxial growth of alternately feeding a gas of a compound of group III and a gas of compound of group V to substrate crystal kept at a given temperature and piling atomic layers of crystal of III-V compound semiconductor one by one, the crystal of the III-V compound semiconductor has at least two kinds of atomic layers of group III and the gas of the compound of element of group III contains at least one of an alkyl derivative of element of group III containing) a halogen atom bonded to an atom of group III and a chloride of element of group III.